

## PATENT COOPERATION TREATY

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## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark  
Office  
(Box PCT)  
Crystal Plaza 2  
Washington, DC 20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 05 December 1996 (05.12.96)	
<b>International application No.</b> PCT/US96/06705	<b>Applicant's or agent's file reference</b> CR9715B
<b>International filing date</b> (day/month/year) 10 May 1996 (10.05.96)	<b>Priority date</b> (day/month/year) 12 May 1995 (12.05.95)
<b>Applicant</b> LAFFEND, Lisa, Anne et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
22 November 1996 (22.11.96)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

H. Zhou

Telephone No.: (41-22) 730.91.11

## P. . ENT COOPERATION TREA

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NOTIFICATION CONCERNING  
SUBMISSION OF PRIORITY DOCUMENTS

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

FLOYD, Linda, A.  
E.I. du Pont de Nemours and Company  
Legal Patent Records Center  
1007 Market Street  
Wilmington, DE 19898  
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 29 January 1997 (29.01.97)		
Applicant's or agent's file reference CR9715B		IMPORTANT NOTIFICATION
International application No. PCT/US96/06705	International filing date (day/month/year) 10 May 1996 (10.05.96)	Priority date (day/month/year) 12 May 1995 (12.05.95)
Applicant E.I. DU PONT DE NEMOURS AND COMPANY et al		

The applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to the following application(s):

<u>Priority application No:</u>	<u>Priority date:</u>	<u>Priority country:</u>	<u>Date of receipt of priority document:</u>
08/440,293	12 May 1995 (12.05.95)	US	10 May 1996 (10.05.96)

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The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	Authorized officer  F. Gateau  Telephone No.: (41-22) 730.91.11
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# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>CR9715B</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 96/06705</b>	International filing date (day/month/year) <b>10/05/96</b>	(Earliest) Priority Date (day/month/year) <b>12/05/95</b>
Applicant <b>E. I. DU PONT DE NEMOURS AND COMPANY et al.</b>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).

2. ☐ Unity of invention is lacking (see Box II).

3. ☒ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing

☒ filed with the international application.

☐ furnished by the applicant separately from the international application,

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

☐ Transcribed by this Authority

4. With regard to the title, ☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:

Figure No. 1 ☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No.

/US 96/06705

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
IPC 6	C12N15/60 C12N1/19	C12P7/18 C12N15/79
C12N9/88	C12N15/74	C12N1/21
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) IPC 6 C12P C12N		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CHEMICAL ABSTRACTS, vol. 118, no. 7, 15 February 1993 Columbus, Ohio, US; abstract no. 56047, DANIEL, ROLF ET AL: "Growth temperature-dependent activity of glycerol dehydratase in Escherichia coli expressing the Citrobacter freundii dha regulon" XP002010809 see abstract & FEMS MICROBIOL. LETT. (1992), 100(1-3), 281-5 CODEN: FMLED7; ISSN: 0378-1097, --- -/--	1,3,5,7, 9,10,19, 33
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
<b>* Special categories of cited documents :</b>		
<b>"A"</b> document defining the general state of the art which is not considered to be of particular relevance		
<b>"E"</b> earlier document but published on or after the international filing date		
<b>"L"</b> document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		
<b>"O"</b> document referring to an oral disclosure, use, exhibition or other means		
<b>"P"</b> document published prior to the international filing date but later than the priority date claimed		
<b>"T"</b> later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
<b>"X"</b> document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		
<b>"Y"</b> document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.		
<b>"&amp;"</b> document member of the same patent family		
Date of the actual completion of the international search  22 August 1996		Date of mailing of the international search report  03.09.96
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016		Authorized officer  Delanghe, L

## INTERNATIONAL SEARCH REPORT

International Application No

US 96/06705

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CHEMICAL ABSTRACTS, vol. 116, no. 9, 2 March 1992 Columbus, Ohio, US; abstract no. 82153, TONG, I TEH ET AL: "1,3- Propanediol production by Escherichia coli expressing genes from the Klebsiella pneumoniae dha regulon" XP002010810 see abstract & APPL. ENVIRON. MICROBIOL. (1991), 57(12), 3541-6 CODEN: AEMIDF;ISSN: 0099-2240,	1,3-10, 13, 19-21, 23,33
X	--- CHEMICAL ABSTRACTS, vol. 120, no. 11, 14 March 1994 Columbus, Ohio, US; abstract no. 126576, OTTO, KARIN ELIZABETH: "Cloning and characterization of the propanediol dehydratase genes in Salmonella typhimurium" XP002010811 see abstract & (1992) 77 PP. AVAIL.: UNIV. MICROFILMS INT., ORDER NO. DA9238983 FROM: DISS. ABSTR. INT. B 1993, 53(8), 3921,	1,2
X	--- CHEMICAL ABSTRACTS, vol. 118, no. 17, 26 April 1993 Columbus, Ohio, US; abstract no. 167540, BOENIGK, RAINER ET AL: "Fermentation of glycerol to 1,3- propanediol in continuous cultures of Citrobacter freundii" XP002010812 see abstract & APPL. MICROBIOL. BIOTECHNOL. (1993), 38(4), 453-7 CODEN: AMBIDG;ISSN: 0175-7598,	1,3,5,7, 19
A	--- WO,A,91 15590 (HENKEL KGAA ;BIOTECHNOLOG FORSCHUNG GMBH (DE)) 17 October 1991	1
X	see claims	19
A	--- EP,A,0 361 082 (HENKEL KGAA ;BIOTECHNOLOG FORSCHUNG GMBH (DE)) 4 April 1990	1
X	see claims	19
A	--- WO,A,93 25696 (AGRONOMIQUE INST NAT RECH ;BORIES ANDRE (FR); CLARET CAROLE (FR)) 23 December 1993	1
X	see claims	19
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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/US 96/06705

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO-A-9115590	17-10-91	DE-A- 4010523	10-10-91
EP-A-0361082	04-04-90	DE-A- 3829618	15-03-90
		DE-A- 3924423	31-01-91
		JP-A- 3065192	20-03-91
		US-A- 5254467	19-10-93
WO-A-9325696	23-12-93	FR-A- 2692281	17-12-93
		EP-A- 0648273	19-04-95